

very widely distributed by telephone, telegraph, and mail, and through the press, and special effort was made to keep the different railroads centering here, whose property was threatened, fully warned as to the progress of the flood. Several of the railroads, on the strength of the warnings, had repair trains in readiness to protect weak places in roadbeds and embankments, and thus escaped damage and avoided delay in traffic which would have been costly. The warnings were well heeded by all classes, and the value of live stock and other property which was moved from the threatened district, and which might have been lost, would, it is conservatively estimated, reach, if not exceed \$300,000. About seventy-five families residing in the low grounds of the northern suburbs of Montgomery, Ala., which were flooded, moved their household effects before the water reached them, while others, on slightly higher ground, were saved the expense of moving by the assurance given from this office that they were safe.

One farmer who had about four hundred tons of hay stored in a barn, which would be reached at a stage of 52 feet, was saved the expense of moving it by information contained in our warnings. The value of the warnings to the railroads can not be estimated, but it was certainly great.

The Manager of the Southern Bell Telephone Company at this place by request of this office, cheerfully cooperated in distributing the warnings, free of charge, to all river towns reached by their lines and by connecting lines of the American Bell Telephone Company, thus giving the information a wider distribution than could have otherwise been obtained.

This flood was the highest that has occurred in the Lower Coosa and

Alabama since 1892. The damage reported from the flood is mostly of a minor nature, and such as could not have been averted.

Nothing of special interest transpired along the rivers of the Pacific coast.

The highest and lowest water, mean stage, and monthly range at 127 river stations are given in Table XI. Hydrographs for typical points on seven principal rivers are shown on Chart V. The stations selected for charting are: Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.

The thickness of ice in the rivers since December 4, 1899, is given in the following table. Although there was a considerable increase in the amount of the ice during February, the culmination of the winter season, yet there were about 6 inches less than during February, 1899, indicating, as was the fact, a much milder condition of affairs as far as the temperature is concerned. This statement applies also to the entire winter, and can readily be traced from week to week through the ice tables.—H. C. Frankenfield, *Forecast Official*.

Thickness of ice in rivers (in inches), winter of 1899-1900.

Stations.	December.				January.					February.				March.			
	4	11	18	25	1	8	15	22	29	5	12	19	26	5	12	19	26
Moorhead, Minn.					12.0	19.0	21.0	24.0	26.0	30.0	32.0	36.0	36.5				
Williston, N. Dak.	1.0	1.5	6.0	8.0	16.0	16.0	16.0		21.0	24.0	26.0	27.5	29.5				
Bismarck, N. Dak.			1.5	9.0	16.0	17.0	17.0	15.0	17.0	17.0	22.0	25.0	26.0				
Pierre, S. Dak.			1.5	3.5	14.0	15.0	10.5	8.0	14.0	15.5	16.0	21.0	20.0				
Yankton, S. Dak.			5.0	7.0	10.0	11.0	10.5	8.5	10.0	11.5	14.5	15.5	20.0				
Sioux City, Iowa				1.5	10.0	8.0	6.0				14.0	16.0	18.0				
Omaha, Nebr.				10.0						6.0	12.0	15.0	17.0				
St. Paul, Minn.				12.5			20.0	16.0	18.0	20.0	22.0	23.0	24.0				
La Crosse, Wis.				5.0	10.0	9.0	7.5	6.0	9.0	11.5	10.5	14.0	14.0				
Dubuque, Iowa			4.0	5.0	12.0	10.5	10.0			11.0	11.0	14.0	16.0				
Davenport, Iowa				5.0	8.0	9.0	6.0			10.0	10.0	15.0	17.0				
Keokuk, Iowa				10.0	10.0		5.0			8.0	0.0	12.0	11.0				
Hannibal, Mo.				8.0						4.0	0.0						
Topeka, Kans.				6.5								2.0	3.0				
Wichita, Kans.				2.0													
Pittsburg, Pa.				4.0													
Parkersburg, W. Va.				1.0	2.0												
Louisville, Ky.				5.0													
Columbus, Ohio				7.0	1.0				3.0	0.5		0.5	1.0				
New Brunswick, N. J.					6.0				2.5								
Bangor, Me.			2.0	2.0	4.5	8.0	9.0	12.0	14.0	14.0	17.0	17.0	16.0				
Albany, N. Y.					4.0	5.0	8.5		2.5	8.0	7.5	2.0	4.0				
Harrisburg, Pa.						3.0	3.0			4.0							
Philadelphia, Pa.					2.0	2.0											
Washington, D. C.					5.0												
Lynchburg, Va.					4.0	2.0						0.5					

CLIMATE AND CROP SERVICE.

By JAMES BERRY, Chief of Climate and Crop Service Division.

The following extracts relating to the general weather conditions in the several States and Territories are taken from the monthly reports of the respective sections of the Climate and Crop Service. The name of the section director is given after each summary.

Rainfall is expressed in inches.

Alabama.—The mean temperature was 43.8°, or about 2.5° below normal; the highest was 82°, at Wetumpka on the 8th, and the lowest, 6°, at Riverton and Valleyhead on the 17th. The average precipitation was 8.01, or about 3.00 above normal; the greatest monthly amount, 17.60, occurred at Union Springs, and the least, 3.88, at Florence.

Farm work very much retarded by excessive rains, which also caused nearly all rivers to overflow. Oats considerably damaged by the cold wave of the 17-18th, but fruit was not sufficiently advanced as to be injured.—F. P. Chaffee.

Arizona.—The mean temperature was 49.9°, or 0.6° above normal; the highest was 90°, at Arivaca on the 25th and 28th, and the lowest, zero, at Snowflake on the 11th. The average precipitation was 0.39, or 0.50 below normal; the greatest monthly amount, 1.93, occurred at Mount Huachuca, while none fell at a number of stations.—W. G. Burns.

Arkansas.—The mean temperature was 39.5°, or 3.5° below normal; the highest was 74°, at Dallas, Elon, and Newport on the 8th, and the lowest, 5° below zero, at Winslow on the 17th. The average pre-

cipitation was 5.06, or 1.03 above normal; the greatest monthly amount, 7.70, occurred at Brinkley, and the least, 2.40, at Silversprings.

Owing to decided temperature changes during the month wheat has been damaged to a considerable extent in many sections, while in others there was sufficient protection afforded by snow. On the whole, however, reports show the condition of wheat to be above the average for this time of year. In some sections land is being prepared for corn, but as a rule the conditions of weather and soil have not been favorable for farm work.—E. B. Richards.

California.—The mean temperature for the State, obtained by weighting the reports from 188 stations, so that equal areas have about the same weight, was 49.9°, which was 2.1° above the February normal for the State, as determined from 155 records; the highest recorded temperature was 95°, at Elsinore, San Diego County, on the 28th, and at Ogilby, San Diego County, on the 14th and 25th; the lowest was 9° below zero, at Bodie, Mono County, on the 6th. The average precipitation for the State, as determined by the records of 188 stations, was 0.94; the deficiency, as indicated by reports from 155 stations, which have normals, was 2.30; the greatest monthly amount, 12.86, at Crescent City, Del Norte County, while none fell at many stations.—Alexander G. McAdie.

Colorado.—The mean temperature was 27.0°, or 1.3° above normal; the highest was 70°, at Lamar and Trinidad on the 22d, and the lowest, 32° below zero, at Walden on the 17th. The average precipitation was 0.84, or 0.14 below normal; the greatest monthly amount,

3.31, occurred at Marshall, and the least, 0.06, at Garnett and Saguache.—*F. H. Brandenburg.*

Florida.—The mean temperature was 58.5°, or 1.9 below normal; the highest was 88°, at Eustis on the 10th, and at Nocatee on the 10th, 12th, and 13th, and the lowest, 16°, at Middleburg on the 2d, and Jasper, Lake City, and De Funiak Springs on the 18th. The average precipitation was 4.42, or 0.6 above normal; the greatest monthly amount, 12.55, occurred at De Funiak Springs, and the least, 1.34, at Key West.

The cold wave on the 18th and 19th did severe damage to the vegetable crop over the northern and central portions of the State. Over the same section tender citrus growth was [killed or badly damaged]. The bulk of the vegetable crop in southern counties escaped, and citrus trees over the same section sustained no serious effects, although freezing weather prevailed as far south as the southern section of Dade County. Orange trees are laden with bloom, and some corn and melons seeded. Farm work, however, is several weeks behind.—*A. J. Mitchell.*

Georgia.—The mean temperature was 44.8°, or 3.5° below normal; the highest was 81°, at Jesup on the 8th, and the lowest, zero, at Dahlonega on the 18th. The average precipitation was 7.96, or 3.17 above normal; the greatest monthly amount, 13.64, occurred at Fort Gaines, and the least, 2.60, at Savannah.

The weather of the month was unseasonable for farm operations, which are in a backward state. The severe cold of the 17th and 18th served to check the premature advance of budding of fruit trees. The oat crop apparently sustained the greatest damage, while wheat is reported in excellent condition.—*J. B. Marbury.*

Idaho.—The mean temperature was 28.4°, or 0.8° above normal; the highest was 76°, at Idaho City on the 25th, and the lowest, 29° below zero, at Marysville on the 15th. The average precipitation was 1.47, or 0.10 below normal; the greatest monthly amount, 3.80, occurred at Murray, and the least, 0.15, at Lost River.—*S. M. Blandford.*

Illinois.—The mean temperature was 23.8°, or 4.2° below normal; the highest was 70°, at Cairo and Equality on the 8th, and the lowest, 19° below zero, at Lanark on the 16th. The average precipitation was 3.91, or 1.36 above normal; the greatest monthly amount, 6.99, occurred at Astoria, and the least, 18.6, at Dixon.

Winter wheat is generally reported in good condition; conflicting reports are received in regard to grass; fruit in the southern half of the State is thought to be unharmed; the month has not been favorable for farm work and little has been done.—*C. E. Linney.*

Indiana.—The mean temperature was 26.5°, or 3.8° below normal; the highest was 69°, at Edwardsville and Evansville on the 8th, and the lowest, 13° below zero, at Fairmount on the 17th. The average precipitation was 3.77, or 0.46 above normal; the greatest monthly amount, 5.70, occurred at Marengo, and the least, 2.22, at Washington.

Frequent, great, and sudden changes in temperature, from warmer to the lowest temperature during this winter, freezing and thawing, and but little or no snow covering, in many localities when most needed, have injured the wheat, and, in general, most fields look brown, but, apparently, in some fields the roots are still vigorous and healthy. In the southern portion the condition of the wheat seems to be better than in the northern portion, as there are quite a number of very good green fields. The wheat in some fields will be plowed up, and corn, oats, or other grain will be sown. Grass is in good condition. Young clover stands well. Timothy is sown and in good condition. Fruit buds are apparently safe. In a few localities it is feared that peach and cherry buds have been killed by the extremely low temperature of the 25th. Livestock is in good condition. But little farm work could be done during the month. Maple molasses was made in the latter part of the month in many localities.—*C. F. R. Wapenhans.*

Iowa.—The mean temperature was 14.8°, or 6.9° below normal; the highest was 60°, at Keokuk on the 7th, and the lowest, 27° below zero, at Denison on the 15th. The average precipitation was 1.30, or 0.24 above normal; the greatest monthly amount, 4.57, occurred at Danville, and the least, 0.18, at Griswold.—*J. R. Sage, Director; G. M. Chappell, Assistant.*

Kansas.—The mean temperature was 27.9°, or 2.5 below normal; the highest was 70°, at Ulysses on the 4th, at Chanute and Englewood on the 6th, and at Emporia on the 7th; the lowest was 13 below zero, at Yates Center on the 17th. The average precipitation was 1.78, or 0.70 above normal; the greatest monthly amount, 3.79, occurred at Wamego, and the least, 0.25, at Winona.

Wheat continued in good condition, and the ground was moist through the month; more spring plowing was done than usual for the season in the southeastern counties, while elsewhere the ground was frozen.—*T. B. Jennings.*

Kentucky.—The mean temperature was 32.5°, or about 3° below normal; the highest was 76°, at Catlettsburg on the 8th, and the lowest, 9° below zero, at Hopkinsville on the 17th and at Marrowbone on the 18th. The average precipitation was 4.63, or 0.84 above normal; the greatest monthly amount, 6.88, occurred at Hopkinsville, and the least, 2.45, at Vanceburg.

The outlook for the wheat crop, as a whole, is very satisfactory, and other crops are reported to be in good condition.—*H. B. Hervey.*

Louisiana.—The mean temperature was 50.1°, or 2.7° below normal; the highest was 82°, at Opelousas on the 28th, and the lowest, 11°, at

Como on the 16th and 17th, at Farmerville on the 16th, and at Oxford on the 18th. The average precipitation was 6.48, or 1.77 above normal; the greatest monthly amount, 12.60, occurred at Amite, and the least, 3.11, at Minden.—*W. T. Blythe.*

Maryland and Delaware.—The mean temperature was 33.5°, or 1.4° below normal; the highest was 72°, at Deerpark, Md., and Sunnyside, Md., on the 8th, and the lowest, 15° below zero, at Deerpark, Md., and Sunnyside, Md., on the 27th. The average precipitation was 4.66, or 1.14 above normal; the greatest monthly amount, 8.22, occurred at Bachmans Valley, Md., and the least, 2.28, at Cumberland, Md.—*F. J. Wals.*

Michigan.—The mean temperature was 16.6°, or 4.0° below normal; the highest was 65°, at Eloise and Grape on the 8th, and the lowest, 38° below zero, at Thomaston on the 25th, and at Humboldt and Sidnaw on the 26th. The average precipitation was 3.18, or 1.42 above normal; the greatest monthly amount, 8.00, occurred at Berrien Springs, and the least, 0.44, at Humboldt.

The average precipitation is the greatest ever recorded during any February since 1888, when State records were begun. Snow fell in greater quantities in the lower peninsula, and particularly in the southern counties, than ever before recorded. The normal or average February snowfall in the southern counties is 9.2 inches, and the greatest record previous to February, 1900, is 16.7 inches, in 1898; this year an average of 25.3 inches fell in February, most of which occurred during the last decade of the month. In the upper peninsula the snowfall was comparatively light, being 16.6 inches compared with the normal of 18.3 inches.—*O. F. Schneider.*

Minnesota.—The mean temperature was 5.2°, or 5.5° below normal; the highest was 47°, at Lynd on the 22d, and the lowest, 42° below zero, at Tower on the 26th. The average precipitation was 0.56, or 0.20 below normal; the greatest monthly amount, 1.33, occurred at Wabasha.—*T. S. Outram.*

Missouri.—The mean temperature was 26.2°, or 5.1° below normal; the highest was 70°, at Poplarbluff on the 8th, and the lowest, 16° below zero, at Windsor on the 17th. The average precipitation was 3.98, or 1.79 above normal; the greatest monthly amount, 7.13, occurred at Potosi, and the least, 1.10, at Mount Vernon.

The snowfall of the month exceeded the usual amount over the greater portion of the State, and over portions of the central and northeast sections, and a few of the west-central and northwestern counties the fall was exceptionally heavy ranging from 20 to over 35 inches. In most of the northern and western counties winter wheat was fairly well protected by snow during the cold spells, and suffered little or no injury from freezing, but in portions of the eastern and southern sections the fields were bare and more or less damage was reported. In general, however, the crop continued in good condition. In many of the southern counties from one-half to three-fourths of the peach buds were reported killed by the low temperatures during the month, and in some localities it was believed that they were all dead. Early varieties of plums and cherries were also injured. In the central and northern counties considerable damage to peaches was reported in some localities, but in general fruit buds of all kinds escaped serious injury.—*A. E. Hackett.*

Montana.—The mean temperature was 20.1°, or 1.1 below normal; the highest was 64°, at Corvallis on the 25th, and the lowest, 43° below zero, at Adel on the 15th. The average precipitation was 0.74, or nearly normal; the greatest monthly amount, 2.24, occurred at Ovando, and the least, 0.13, at Deerlodge.—*E. J. Glass.*

Nebraska.—The mean temperature was 20.8°, or 3.4° below normal; the highest was 68°, at Benkelman on the 22d, and the lowest, 29° below zero, at Norfolk on the 15th. The average precipitation was 1.07, or 0.39 above normal; the greatest monthly amount, 2.40, occurred at Curtis, and the least, 0.20, at Springview.—*G. A. Loveland.*

Nevada.—The mean temperature was 35.3°, or about 5° above normal; the highest was 76°, at Los Vegas on the 25th, and the lowest, 12° below zero, at Fenelon on the 16th. The average precipitation was 0.51, or about 0.70 below normal; the greatest monthly amount, 1.60, occurred at Palisade, while none fell at a few stations.

The weather of the month was remarkably fine, mild, and pleasant. Plowing was in progress during the greater part of the month. At the end of the month there was but very little snow in the mountains to supply water for irrigation during the coming season.—*J. H. Smith.*

New England.—The mean temperature was 23.3°, or 0.2° above normal; the highest was 68°, at Monson, Mass., on the 12th, and the lowest, 30° below zero, at Berlin Mills, N. H., on the 28th. The average precipitation was 7.13, or 3.69 above normal; the greatest monthly amount, 12.74, occurred at Jacksonville, Vt., and the least, 2.17, at Burlington, Vt.—*J. W. Smith.*

New Jersey.—The mean temperature was 31.0°, or 0.4° below normal; the highest was 69°, at Salem on the 13th, and the lowest, 6° below zero, at Chester and Dover on the 2d. The average precipitation was 5.30, or 1.25 above normal; the greatest monthly amount, 7.88, occurred at Charlotteburg, and the least, 3.27, at Atlantic City.—*E. W. McGann.*

New Mexico.—The mean temperature was 38.2°, or 1.5° above normal; the highest was 80°, at Carlsbad on the 24th, and the lowest, 9° below zero, at Winsors on the 8th and Bluewater on the 9th. The average precipitation was 0.42, or 0.09 below normal; the greatest monthly

amount, 1.35, occurred at Winsors, while at Eagle and Hillsboro none was recorded, and only a trace at Carlsbad, Los Lunas, and Roswell.—*R. M. Harding.*

New York.—The mean temperature was 22.7°, or 0.4° below normal; the highest was 69°, at Westfield on the 8th, and the lowest, 34° below zero, at North Lake on the 27th. The average precipitation was 3.87, or 1.06 below normal; the greatest monthly amount, 8.39, occurred at Carmel, and the least, 1.00, at Mount Morris.

The weather during February was very unfavorable for wheat, rye, and grasses. The marked features were lack of snow, sudden and decided changes in temperature, and two or three general rains, followed by freezing temperature, with little or no snow protection, ice forming in bare fields. Wheat is generally brown and lifeless, the reports indicating a decided decline in the condition since January 31. Only about 25 per cent. of the correspondents report favorable prospects at this time.—*R. G. Allen.*

North Carolina.—The mean temperature was 39.3°, or 4.0° below normal; the highest was 78°, at Sloan on the 9th, and the lowest, 6° below zero, at Highlands on the 18th. The average precipitation was 5.80, or 1.46 above normal; the greatest monthly amount, 13.84, occurred at Highlands, and the least, 2.69, at Wilmington.

Farm work was greatly impeded during the month on account of the soaked condition of the soil and the almost impassable roads. Winter wheat suffered considerably by repeated freezing and thawing, and the outlook for that crop was not so favorable.—*C. F. von Herrmann.*

North Dakota.—The mean temperature was 2.0°, or 5° below normal; the highest was 46°, at Medora on the 21st, and the lowest, 48° below zero, at McKinney on the 9th. The average precipitation was 0.46, or 0.03 below normal; the greatest monthly amount, 1.10, occurred at Towner, and the least, 0.08 at Sheyenne.—*B. H. Bronson.*

Ohio.—The mean temperature was 26.0°, or 2.4° below normal; the highest was 80°, at Lowell on the 8th, and the lowest, 20° below zero, at Green Hill and Millport on the 27th. The average precipitation was 3.53, or 0.65 above normal; the greatest monthly amount, 5.75, occurred at Wauseon, and the least, 2.00, at Willoughby.

Wheat has suffered considerably during the month, mostly from freezing and thawing, which has pushed the plants out of the ground in many localities, and from the deficiency of snow protection. As a result of injuries by the fly and winter killing a good many fields of wheat will be plowed up and sown to oats or planted to corn.—*J. Warren Smith.*

Oklahoma.—The mean temperature was 37.5°, or 0.8° below normal; the highest was 77°, at Fort Sill on the 14th, and the lowest, 3° below zero, at Hopeton on the 17th. The average precipitation was 1.44, or 0.17 below normal; the greatest monthly amount, 4.75, occurred at Hartshorne, and the least, 0.10, at Mangum.

The month was generally favorable to the winter wheat, which is reported in an excellent condition, the damage inflicted by the cold weather being but slight, while the cold acted advantageously in retarding development; rye is reported in fine condition; the ground is in good plowing condition, with abundant moisture; plowing for corn, and oat seeding is well advanced; the fruit is reported in fine condition, all kinds, both large and small, being most promising, the only damage reported being to the early budded peaches.—*C. M. Strong.*

Oregon.—The mean temperature was 39.4°, or 2.1 above normal; the highest was 65°, at Ashland on the 17th, and the lowest, 10° below zero, at Joseph on the 16th. The average precipitation was 4.51, or nearly normal; the greatest monthly amount, 14.00, occurred at Glenora, and the least, trace, at Silverlake.

The general tenor of reports at the end of the month was to the effect that the early grain, although there is a smaller acreage than usual, was never before in better condition than it is the present season, and that no material damage was done by the February freeze to the wheat or fruit crops.—*G. N. Salisbury.*

Pennsylvania.—The mean temperature was 27.1°, or 1.6° below normal; the highest was 81°, at Confluence on the 9th, and the lowest, 17° below zero, at Butler on the 27th. The average precipitation was 4.22, or 1.05 above normal; the greatest monthly amount, 7.75, occurred at Coatesville, and the least, 1.00, at Smethport.

Lack of snow protection, heavy rain storms which badly washed some fields, and successive thawing and freezing, were injurious to winter grain, and its general appearance at the close of the month was below average, but the extent of damage can not be determined until later as the thawing may not have been deep enough to seriously affect the roots. Many reports are favorable and say that the crop appears uninjured. The most damaged portions appear to be local. March weather conditions will largely determine the prospects of the crop. Complaints of injury by fly are numerous.—*T. F. Townsend.*

South Carolina.—The mean temperature was 44.0°, or 2.3 below normal; the highest was 78°, at Georgetown on the 8th and the lowest, 1°, at Liberty on the 1st. The average precipitation was 5.77, or 1.37 above normal; the greatest monthly amount, 10.61, occurred at Holland, and the least, 1.86, at Yemassee.

The weather conditions were unfavorable for farming operations, and the severe cold of the 18th killed much truck of all kinds in the coastal regions.—*J. W. Bauer.*

South Dakota.—The mean temperature was 13.0°, or about 3° below normal; the highest was 60°, at Forest City on the 28th, and the lowest, 32° below zero, at Watertown on the 14th. The average precipitation was 0.26, or about 0.66 below normal; the greatest monthly amount, 1.03, occurred at Oelrichs, and the least, trace, at Plankinton.—*S. W. Glenn.*

Tennessee.—The mean temperature was 37.3°, or 3.0° below normal; the highest was 76°, at Springfield on the 8th, and the lowest, 9° below zero, at Rugby on the 18th. The average precipitation was 5.17, or 0.23 above normal; the greatest monthly amount, 9.08, occurred at Byrdstown, and the least, 2.70, at Jackson.

On account of the continued cold and the large number of days with rain or snow, but little farm work could be done. The sowing of oats was much delayed and scarcely any other spring planting was done.—*H. C. Bate.*

Texas.—The temperature on an average for the month, determined by comparison of 46 stations distributed throughout the State was 1.8 below the normal. There was a deficiency for the month generally throughout the State with the greatest over east Texas, the eastern portion of north Texas, the coast district, and southwest Texas, where the deficit ranged from 1.5 to 5.6. The highest was 93°, at Fort Ringgold on the 28th, and the lowest, 5°, at Amarillo on the 15th. The precipitation on an average for the month, determined by comparison of 54 stations distributed throughout the State, was 0.68 below the normal. There was a slight excess in a few scattered localities, but there was a general deficiency elsewhere with the greatest amounting to more than 2.00 inches over east Texas and the eastern portion of north Texas. The rainfall for the month was not well distributed throughout the agricultural portions of the State. The greatest monthly amount, 7.34, occurred at Jasper, while none fell at several scattered stations.

The cold weather during the month retarded farming operations generally, and spring plowing has been delayed some on account of dry weather over the northern portion of the State. This work will, however, be rushed as soon as there is sufficient rainfall to put the ground in good condition. Wheat was slightly damaged by the severe freeze of the 17th and 18th, especially where not pastured, and crops on sandy land were injured somewhat by high winds; otherwise, the weather was generally favorable and the crop was reported unusually good at the close of the month. Rain will soon be needed throughout the wheat belt. Winter oats were killed to the ground by the freeze and the crop badly damaged, but the outlook at the close of the month was that the crop would recover as the plant was only killed to the ground. Sowing of spring oats progressed nicely considering the cold weather and lack of rainfall. A good acreage has already been sown, and seedling will soon be completed. Many farmers are preparing to plant corn, and with favorable weather planting will be rushed during the coming month.—*J. L. Cline.*

Utah.—The mean temperature was 32.2°, or 3.8° above the normal; the highest was 73°, at St. George on the 21st, and the lowest, 24° below zero, at Woodruff on the 17th. The average precipitation was 0.57, or 0.65 below normal; the greatest monthly amount, 2.45, occurred at Farmington, the least, none, at Fort Duchesne and eight other stations.—*L. H. Murdoch.*

Virginia.—The mean temperature was 34.7°, or 5.3 below normal; the highest was 78°, at Meadowdale on the 9th, and the lowest, 7° below zero, at Dale Enterprise on the 19th and 20th. The average precipitation was 4.11, or 0.52 above normal; the greatest monthly amount, 5.89, occurred at Stanardsville, and the least, 2.45, at Westpoint.

The close of the month found crop conditions still quite favorable over the State, although there was a slight falling off in winter wheat as compared with its condition at the end of January.—*E. A. Evans.*

Washington.—The mean temperature was 35.7°, or nearly normal; the highest was 67°, at Bridgeport on the 21st, and the lowest, 22° below zero, at Northport on the 15th. The average precipitation was 3.50, or 0.53 below normal; the greatest monthly amount, 15.23, occurred at Monte Cristo, and the least, 0.30, at Moxee.—*A. B. Wolluber.*

West Virginia.—The mean temperature was 30.7°, or 1.3° below normal; the highest was 83°, at Marlinton and Weston on the 8th, and the lowest, 11° below zero, at Elkins on the 20th. The average precipitation was 3.94, or 0.38 above normal; the greatest monthly amount, 5.62, occurred at Madison, and the least, 2.31, at Romney.

The weather during the month was unfavorable for winter wheat, especially the late sown. Practically no farm work was done.—*E. C. Vose.*

Wisconsin.—The mean temperature was 11.3°, or 5.8° below normal; the highest was 60°, at Chilton on the 11th, and the lowest, 39° below zero, at Prentice on the 9th, and at Heafford on the 26th. The average precipitation was 1.73, or 0.28 above normal; the greatest monthly amount, 3.69, occurred at New London, and the least, 0.38, at Wau-paca.—*W. M. Wilson.*

Wyoming.—The mean temperature was 20.5°, or 1.2° below normal; the highest was 60°, at Cody on the 28th, and the lowest, 36° below zero, at Basin on the 16th. The average precipitation was 0.90 or 0.14 above normal; the greatest monthly amount, 4.00, occurred at Centennial, and the least, trace, at Basin.—*W. S. Palmer.*